

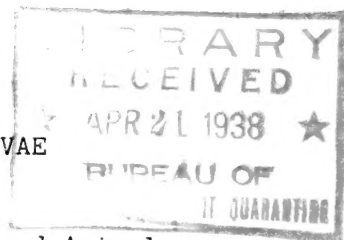
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Bureau of Entomology and Plant Quarantine

AN ARTIFICIAL SHIPPING MEDIUM FOR YOUNG LARVAE
OF COCHLIOMYIA AMERICANA



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In connection with studies of the screwworm fly (Cochliomyia americana C. and P.) it was often necessary to ship living materials from one laboratory to another. Many phases of the work required young larvae; and although eggs were shipped for some time, this method was not satisfactory, since often the eggs hatched in transit, or failed to hatch, which interrupted the general procedure of experimentation.

A very satisfactory method for shipping young Cochliomyia americana larvae, devised somewhat after that employed for shipping surgical maggots, was developed. It consists of partly filling 1-inch by 4-inch vials with the following medium:

100 cc hot 4-percent agar solution
100 cc sweet milk
50 grams ground lean beef
0.2 cc formalin (39 percent)

After the medium has been poured into the vials they are slanted until the agar sets. Complete setting is important, as otherwise the liquefaction of medium that occurs when larvae are present tends to drive the larvae from the medium.

The larvae can be placed on the medium as soon as the agar sets, or the vials can be kept in a refrigerator until needed.

No details of the tests involved in the development of this medium are presented here, but a few remarks regarding the efficacy of the above formula seem to be advisable.

Twenty-eight shipments were made from Dallas to Menard and Sonora, Tex. Twenty-five of these shipments arrived in good condition. No difficulty was reported in getting the larvae to establish themselves in wounds on animals after they were transferred from the medium. After the larvae are pocketed in the medium they can withstand considerable cold. For example, 50 percent of the larvae revived after being exposed to 40° F. for 40 hours or to 60° F. for 7 days.

